# ES-315-F

*Intelligent Layer 2 Managed Switch*

# *Quick Start Guide*

Version 3.70
7/2007
Edition 1

| DEFAULT LOGIN | |
|---|---|
| **IP Address** | **http://192.168.1.1** |
| **Username** | **admin** |
| **Password** | **1234** |

ZyXEL

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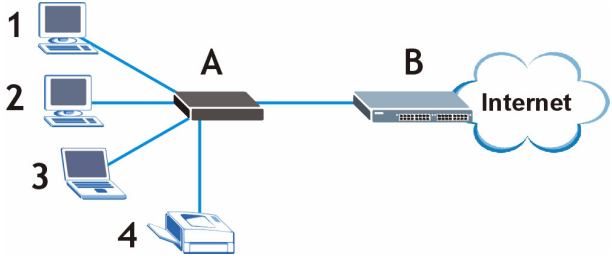
# 1 Overview

Your ES-315-F is an intelligent layer-2 Ethernet switch with four Fast Ethernet RJ-45 ports and one Fast Ethernet Small Form-factor Pluggable slot. Use the ES-315-F to connect up to four Ethernet devices to your network. The following example shows your ES-315-F (**A**) connecting several devices (**1** ~ **4**) and allowing them to communicate with one another and access the Internet through the Internet Service Provider's network switch (**B**).




This Quick Start Guide shows you how to do the following:

Make Hardware Connections on page 2.

Log In To the Web Configurator on page 14.

Set the Password on page 16.

Set Up Your Network on page 18.

Wall-mount the ES-315-F on page 22.

# 2 Make Hardware Connections

## 2.1 Connect the WAN

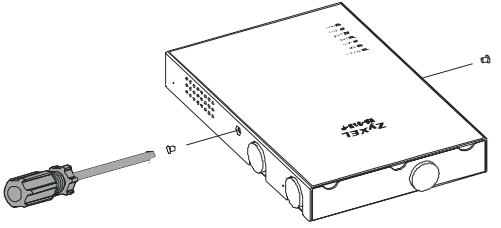
To make the ES-315-F's fiber-optic connection you need to:

1. Open the ES-315-F.
2. Install an SFP transceiver.
3. Attach the wire mounts.
4. Insert a fiber-optic cable through a bushing and wrap it around the wire mounts.
5. Connect the fiber-optic cable to the SFP transceiver.

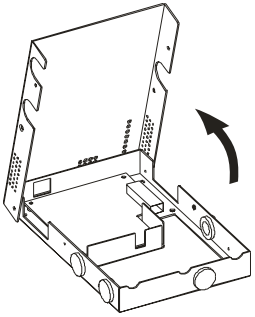
Only qualified technicians should perform these actions!

### 2.1.1 Open the ES-315-F

1. Remove both screws from the housing.



**2** Lift the cover.



### 2.1.2 Install A Transceiver

The ES-315-F supports MSA (Multi-Source Agreement) compliant SFP transceivers. Inside the ES-315-F, there is a slot for an SFP transceiver with an LC-type connector.

Please observe the following warnings when working with transceivers.

- Only trained and qualified personnel should install or replace transceivers.
- SFP transceivers are sensitive to static. To prevent damage from electrostatic discharge (ESD), use an ESD preventive wrist strap when you install or remove a SFP transceiver.
- Avoid getting dust and other contaminants into the optical bores.

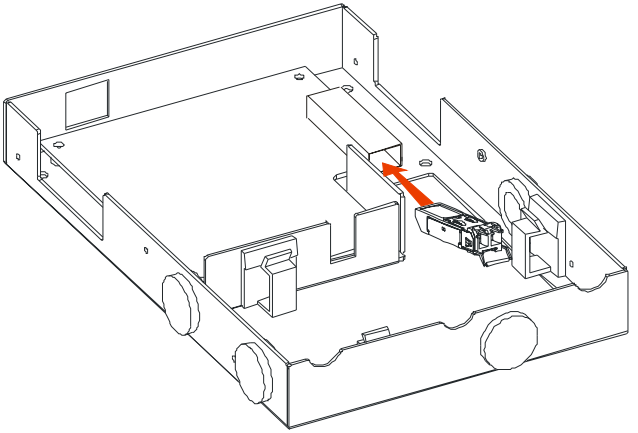
- SFP transceivers are equipped with a Class 1 laser, which emits invisible radiation when the device or system is powered up. To avoid possible eye injury, do not look into an operating fiber-optic transceiver's connectors.
- Do not remove and install an SFP transceiver more often than is absolutely necessary. Doing so may shorten the useful life of the transceiver.

Take the following steps to attach a transceiver.

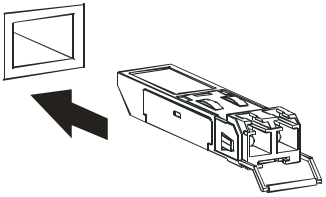
**1** Disconnect all fiber-optic cables from an SFP transceiver before installing or removing it.

**2** Remove the SFP transceiver from its protective packaging.

**3** Align the SFP transceiver in front of the SFP slot opening.

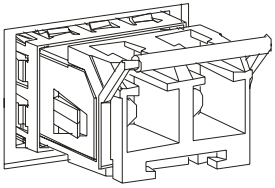


**4** Insert the SFP transceiver into the slot until it snaps into place.



Your SFP transceiver has a mechanism that prevents incorrect insertion. Do NOT force or twist the SFP transceiver into a slot.

**5** Lock the transceiver into place (if your transceiver has a locking mechanism).



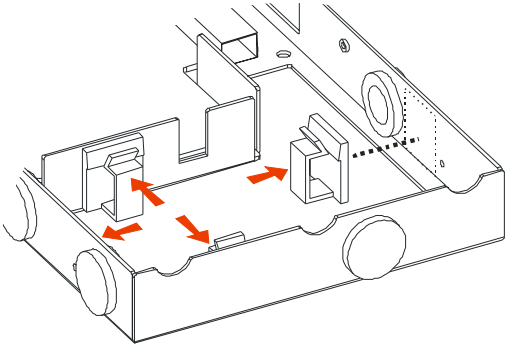
See the transceiver's User's Guide for more information.

### 2.1.3 Install Fiber-optic Cable

Follow these procedures to install the fiber-optic cable.

**Attach Wire Mounts**

Remove the adhesive cover from the wire mounts and attach them to the sides of the ES-315-F.



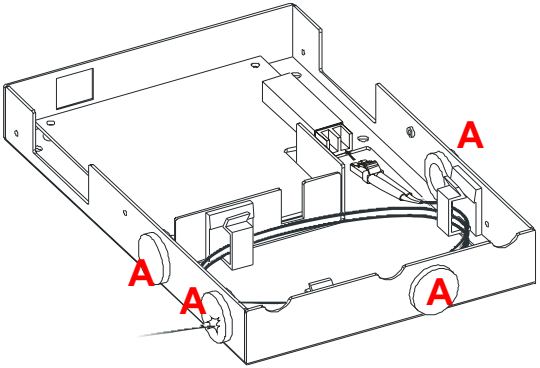
**Insert Fiber-optic Cable**

The ES-315-F has holes (labelled **A** in the following figure) through which you can insert fiber-optic cable.

1. Insert a bushing into a hole through which you will insert the fiber-optic cable.
2. Create a hole in the bushing and thread the fiber-optic cable through it.

**3** Insert bushings into the remaining vacant holes to cover them.

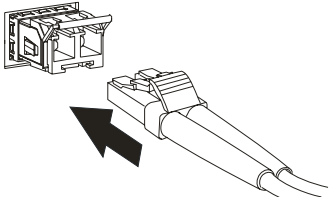
**4** Coil excess fiber-optic cable around the inside of the ES-315-F using the wire mounts as shown in the following figure.




**Connect The Fiber-optic Cable To The Transceiver**

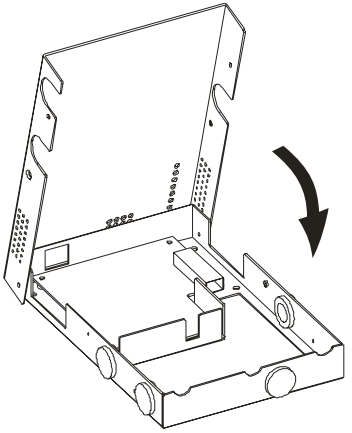
**1** Remove the dust plugs from the SFP transceiver and the cables.

**2** Insert the end of the fiber-optic cable into the SFP transceiver.

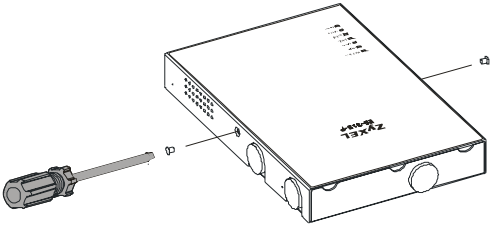


**Close the ES-315-F**

**1** Close the cover.

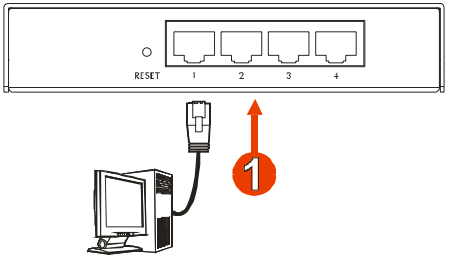


**2** Replace the screws.

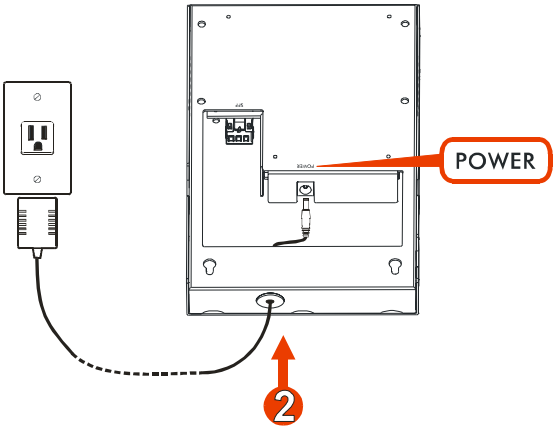


## 2.2 Make LAN and Power Connections

**1 LAN:** Using an Ethernet cable, connect your computer to one of the **LAN** ports (**1**, **2**, **3** or **4**) for initial configuration.



**2 POWER**: take the following steps to connect the included power adaptor.




- Choose a hole in the ES-315-F to use for the power cable. If you did not already cover the hole with a bushing when you inserted the fiber-optic cable, do so now.
- Create a hole in the bushing and thread the power cable through it.
- Connect the power cable connector to the ES-315-F's **POWER** socket.
- Connect the power adaptor to a suitable power source.

Use only the power adaptor that came with the ES-315-F.

## 2.3 Check the LEDs

Look at the LEDs (lights) on the front of the ES-315-F.

- The **PWR/SYS** LED turns green if the power is on.
- The **LAN 1**, **2**, **3** or **4** and **WAN** LEDs turn on when the corresponding ports are properly connected, and blink when there is traffic.

If one of the LEDs does not behave as expected, check the connection. Make sure the device to which the corresponding port is connected is turned on and working normally. If this does not help, turn the ES-315-F off and on again.

## 2.4 Set Up Your Computer's IP Address

This section shows you how to set up your computer to access the ES-315-F.

You must set your computer to use a static IP address in the 192.168.1.2 - 192.168.1.254 range with a subnet mask of 255.255.255.0. This ensures that your computer can communicate with your ES-315-F.

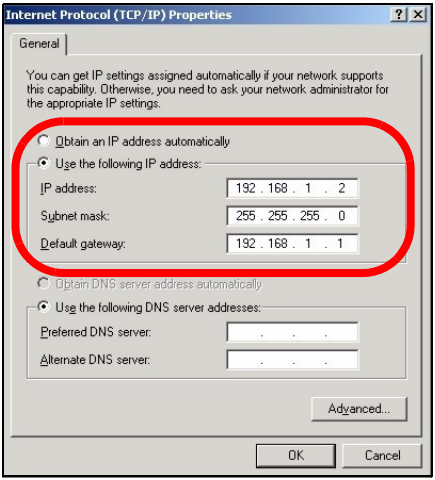
The following instructions are for the Windows 2000, Windows NT and Windows XP operating systems.

1. In Windows XP, click **Start** > **Control Panel**.

   In Windows 2000/NT, click **Start** > **Settings** > **Control Panel**.
2. In Windows XP, click **Network Connections**.

   In Windows 2000/NT, click **Network and Dial-up Connections**.
3. Right-click **Local Area Connection** and then click **Properties**.
4. Select **Internet Protocol (TCP/IP)** (under the **General** tab in Windows XP) and click **Properties**.
5. The **Internet Protocol TCP/IP Properties** screen opens (the **General** tab in Windows XP).

Note down your computer's current IP settings before you change them. You may need them later.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 1 . 2
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 1 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

6 Select **Use the following IP address** and fill in the **IP address** (choose one in the range 192.168.1.2 - 192.168.1.254), **Subnet mask** (255.255.255.0), and **Default gateway** (192.168.1.1) fields.

7 Click **OK** to close the **Internet Protocol (TCP/IP) Properties** window.

8 Click **Close** (**OK** in Windows 2000/NT) to close the **Local Area Connection Properties** window.

Close the **Network Connections** window.

# 3 Log In To the Web Configurator

Take the following steps to access the ES-315-F for initial configuration.

Use Internet Explorer 6.0 and later versions or Netscape Navigator 7.0 and later versions with JavaScript enabled and pop-up blocking disabled.

Open an Internet browser (such as Internet Explorer or Netscape Navigator). Enter the ES-315-F's IP address in the address bar.

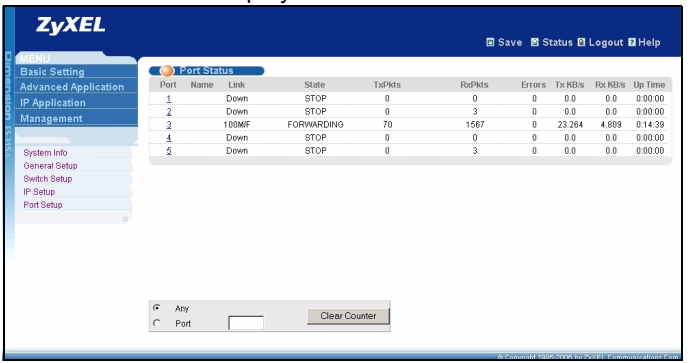
The ES-315-F's default IP address is 192.168.1.1.

A window similar to the following appears.

Enter the default username (**admin**) and the default password (*1234*). Click **OK**.

**?** If you do not see this screen, make sure that your Internet browser allows pop-up windows (in Internet Explorer, select **Tools** > **Pop-up Blocker** and then select **Turn Off Pop-up Blocker**). Reload the web page.
If this does not help, make sure the IP addresses and subnet masks of the ES-315-F and the computer are in the same IP address range (see section 2.4).

The **Status** screen displays.



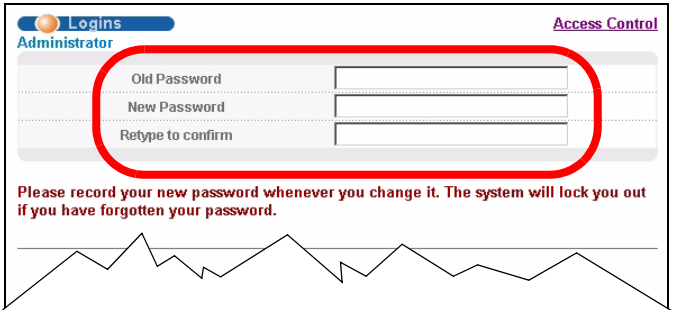

# 4 Set the Password

For security reasons, you should change the password when you first log in.

Take the following steps to do this.

**1** Click **Management** in the navigation panel on the left of the screen. In the menu that displays, click **Access Control**. Then, click **Logins**.

**2** The following screen displays.


Logins
Access Control
Administrator
Old Password
New Password
Retype to confirm
Please record your new password whenever you change it. The system will lock you out if you have forgotten your password.

**3** Enter the login information you want to use, as follows.

The password is case sensitive - “ABCD” is not the same as “abcd”.

- Enter the default password (**1234**) in the **Old Password** field.
- Choose a new password up to 31 characters in length (letters, numerals, spaces, dashes (-) and underscores (_) are allowed) and enter it in the **New Password** field. An asterisk (*) displays for each character you enter.

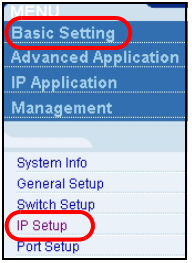
Be sure to record the new password and keep it in a safe place. If you forget this information, you will need to reset the ES-315-F to its factory defaults (press the **Reset** button in for 3 ~ 5 seconds).

- Re-enter the new password in the **Re-type to confirm** field.
- Click **Apply**. Enter your new login information in the window that displays.
- Log in to the web configurator again, using your new password.
- Click **Save**.

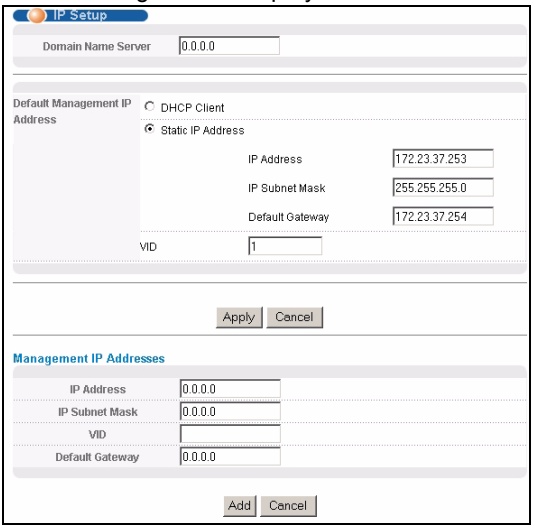
# 5 Set Up Your Network

This section shows how to set the ES-315-F's IP address so it is in the same subnet as the other devices on your network. If it is not in the same subnet, it cannot communicate with the other devices.

In the web configurator's navigation panel, click **Basic Settings**, then select **IP Setup**.




The following screen displays.



If you change the ES-315-F's IP address, you will need to use the new one in order to access the web configurator once you click **OK**.

- If you have a DHCP server on your network that can assign a dynamic IP address to your ES-315-F, go to section 5.1.
- If you have a static IP address and subnet mask you want to use, go to section 5.2.

If you are unsure which to choose, check the information about your computer's IP address you wrote down in section 2.4. If your computer was set to obtain an IP address automatically, it used DHCP. If not, it used a static IP address. If this does not help, contact your network administrator or Internet Service Provider (ISP).

## 5.1 Using DHCP

If you want your ES-315-F to get an IP address automatically, do the following.

- Select **DHCP Client** in the **Default Management IP Address** field.

If you do this, ensure that you can access the DHCP server's list of devices to which it has given IP addresses. If you do not know the IP address assigned to the ES-315-F, you cannot access its web configurator.

- Click **Apply**, then click **Save**. Next time you want to access the ES-315-F's web configurator, you must use the IP address assigned to the ES-315-F by the DHCP server.
- Return your computer's IP settings to their previous values, if necessary.

## 5.2 Using a Static IP Address

If you have an IP address, subnet mask, gateway and DNS details to use, do the following.

- Select **Static IP Address** in the **Default Management IP Address** field. Enter the information in the relevant fields.
- Click **Apply**, then click **Save**. Next time you want to access the ES-315-F's web configurator, you must use its new IP address.
- Return your computer's IP settings to their previous values, if necessary.

If you cannot access the ES-315-F, have problems accessing the Internet through the ES-315-F, or forget the password, you may need to reset the ES-315-F to its factory defaults. If you do this, all configured information is lost. To restart the ES-315-F, hold the **RESET** button on the rear panel in for three to five seconds.

# 6 Wall-mount the ES-315-F

Take the following steps to hang your ES-315-F on a wall.

**1** Select a position free of obstructions on a sturdy wall.

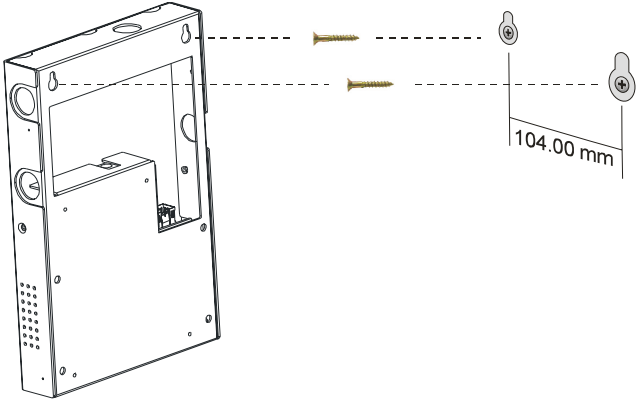
**2** Drill two holes for the screws, exactly 104 mm apart.

Be careful to avoid damaging pipes or cables located inside the wall when drilling holes for the screws.

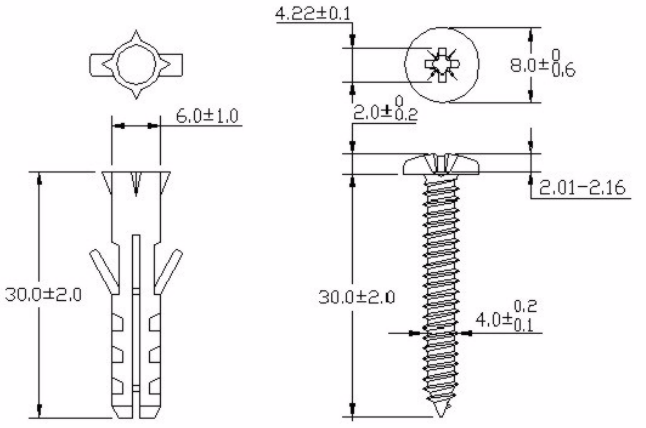
**3** Do not insert the screws all the way into the wall. Leave a small gap of about 0.5 cm between the heads of the screws and the wall.

**4** Make sure the screws are snugly fastened to the wall. They need to hold the weight of the ES-315-F with the connection cables.

**5** Align the holes on the back of the ES-315-F with the screws on the wall. Hang the ES-315-F on the screws.



The following are dimensions of an M4 tap screw and masonry plug used for wall mounting. All measurements are in millimeters (mm).

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